

REMARKS

Claims 1-6, 8-10, 12-18, 20, 22-24, 26, and 28 are pending.
Claims 1, 12, and 18 are in independent form.

CLAIM 12

In the action mailed February 9, 2007, claim 12 was rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,868,086 to Putzolu et al. (hereinafter "Putzolu").

Claim 12 relates to a method that includes performing a lookup in a routing table to determine a proxy egress port by which data is to leave a component, sending a request for an address of an egress component by which the data is to leave a networking router architecture to reach a receiver, receiving a reply to the request, labeling the data with the address to identify the egress component, and forwarding the data, based on the address, through an intermediate component acting as a transparent bridge to the egress component. The reply includes the address of the egress component.

The rejection of claim 12 is based on the contention that Putzolu sends a request for an address of an egress component, receives a reply to the request that includes the address of the egress component, and labels the data with the address received in the reply, as recited.

Applicant respectfully disagrees. In this regard, Putzolu relates to distributed devices that act as individual logical routers. *See, e.g., Putzolu*, col. 1, line 31-33. These distributed devices have multiple elements that act as ingress and egress points for data packets exchanged with external subnetworks. *Id.*, col. 1, line 33-36.

In routing data between these external subnetworks, one of the elements in Putzolu's distributed device can act as an ingress and receive a data packet from an external network. *Id.*, col. 3, line 64-66. Using a destination address in the data packet's header, the ingress looks up the data packet's "next-hop subnetwork" in an internal network-layer routing table. *Id.*, col. 4, line 11-13. Using the identity of the next-hop network, the same ingress looks up a VLAN identifier for the "next-hop subnetwork" from an internal VLAN table. *Id.*, col. 4, line 14-16. *See also id.*, FIGS. 3B, 3C and the written description thereof. The VLAN identifier is part of a data layer header with which the ingress tags the incoming data packet. *Id.*, col. 4, line 17-21. The VLAN tags are used to route a data packet over a VLAN inside Putzolu's distributed device. *Id.*, col. 3, line 1-2.

The ingress element in the Putzolu's distributed device can also determine a data layer destination address of the packet. *Id.*, col. 4, line 24-25. In particular, the ingress can send an ARP request over the VLAN appropriate to the data packet's next-hop subnetwork destination. *Id.*, col. 4, line 27-30. The egress in Putzolu's distributed device removes the VLAN tag and broadcasts the ARP packet to a connected external subnetwork. *Id.*, col. 4, line 30-33.

Each host on the next-hop subnetwork receives the ARP packet from which the VLAN tag has been removed. *Id.*, col. 4, line 34-35. The ARP packet identifies a network-layer destination address for which a data-layer address is requested. *Id.*, col. 4, line 35-37. If a host determines that its network-level address matches the address provided by the ARP packet, the host generates a response that includes its data layer address. *Id.*, col. 4, line 38-44. This address makes its way to the ingress port for the data packet and is written into the data-layer header of the data packet. *Id.*, col. 4, line 45-45.

Thus, the ingress in Putzolu's distributed device can:

- look up, in an internal VLAN table, a VLAN identifier that is used to route a data packet inside Putzolu's distributed device, and tag a data packet with the VLAN identifier in a data layer header; and

- create an ARP request that triggers a response that includes the data layer address of a host in a next-hop subnetwork, and label the data packet with the data layer address of this host.

The rejection is understood to miss the distinctions between Putzolu's VLAN identifier and the data layer address of a host in a next-hop subnetwork. For example, the rejection contends that the ARP request for the data layer address of a host in a next-hop subnetwork is a request for an address of an egress component, as recited in claim 12. Applicant respectfully disagrees. A host in a next-hop subnetwork is not an egress component. Moreover, Putzolu's VLAN identifiers (which the rejection points to as addresses of an egress component) are located in a VLAN table that is internal to the ingress element. Since VLAN identifiers are located internally, there is no description or suggestion of the sending of a request for an address of an egress component, as recited in claim 12.

As another example, the rejection contends that Putzolu's tagging of a data packet with a VLAN identifier constitutes the labeling of data with an address to identify the egress component. However, claim 12 also recites that the reply to the request for an address of an egress component includes the address used to label data. However, Putzolu's VLAN identifiers are located in a VLAN table that is internal to the ingress element.

Thus, Putzolu neither describes nor suggests elements and/or limitations recited in claim 12. Accordingly, anticipation has not been established and applicant requests that the rejections of claim 12, and the claims dependent therefrom, over Putzolu be withdrawn.

Claim 12 was also rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,249,820 to Dobbins et al. (hereinafter "Dobbins").

As shown above, claim 12 has been amended to recite that an intermediate component acts as a transparent bridge forwarding data through to an egress component. Dobbins neither describes nor suggests such forwarding. Instead, Dobbins at least suggests that a central switching engine is used. *See, e.g., Dobbins*, col. 11, line 59-67.

Accordingly, claim 12 is not anticipated by Dobbins. Applicant requests that the rejection of claim 12 over Dobbins be withdrawn.

CLAIM 1

Claim 1 was rejected under 35 U.S.C. § 102(e) as anticipated by Putzolu.

Claim 1 relates to an apparatus that includes a first component configured to perform a route look-up to identify a proxy egress port by which a data packet is to leave the first component, to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which the data packet is to leave a networking router architecture to reach the receiver, to receive a response to the ARP request that includes the hardware address of the egress port, and to label the data packet with information identifying the hardware address of the egress port, a second component comprising the egress port and configured to receive the data packet, and an intermediate component bridging the first component and the second component and acting as a transparent bridge to forward the ARP request and the labeled data packet based on the hardware address of the egress port.

The rejection of claim 1 is based on the contention that Putzolu's ingresses are configured to send an Address Resolution Protocol (ARP) request for a hardware address of an egress port by which a data packet is to leave a networking router architecture to reach the receiver and to label the data packet with information identifying a hardware address of the egress port that is included in a response to the ARP request.

Applicant respectfully disagrees. As discussed above, Putzolu's ARP requests are made to identify the data layer address of a host in a next-hop subnetwork. A host in a next-hop subnetwork is not an egress component. Moreover, Putzolu's VLAN identifiers (which the rejection points to as hardware addresses of an egress component) are located in a VLAN table that is internal to the ingress element. Since VLAN identifiers are located internally, there is no description or suggestion that an Address Resolution Protocol (ARP) request for a hardware address of an egress port is sent, as recited in claim 1.

As another example, the rejection contends that Putzolu's tagging of a data packet with a VLAN identifier constitutes the labeling of data with an address to identify the egress component. However, claim 1 also recites that the information identifying a hardware address of the egress port is included in

a response to the ARP request. However, Putzolu's VLAN identifiers are located in a VLAN table that is internal to the ingress element.

Thus, Putzolu neither describes nor suggests elements and/or limitations recited in claim 1. Accordingly, anticipation has not been established and applicant requests that the rejections of claim 1, and the claims dependent therefrom, over Putzolu be withdrawn.

Claim 1 was also rejected under 35 U.S.C. § 102(e) as anticipated by Dobbins.

Claim 1 has been amended to recite an intermediate component that bridges the first component and the second component and acts as a transparent bridge to forward the ARP request and the labeled data packet based on the hardware address of the egress port. This is related to the subject matter recited in former dependent claim 7, with the exception that the subject matter recited in dependent claim 6 has not been added to claim 1. Accordingly, the intermediate component forwards a "labeled data packet" rather than an "encapsulated data packet."

Dobbins neither describes nor suggests such forwarding. Instead, as discussed above, Dobbins at least suggests that a central switching engine is used.

Accordingly, claim 1 is not anticipated by Dobbins. Applicant requests that the rejection of claim 1 over Dobbins be withdrawn.

CLAIM 18

Claim 18 was rejected under 35 U.S.C. § 102(e) as anticipated by Putzolu.

Claim 18 relates to an article that includes one or more machine-readable media that store machine-executable instructions for causing one or more machines to perform a look up in a routing table to determine a proxy egress port by which data is to leave the one or more machines, send a request for a media access control (MAC) address of an egress component by which the data is to leave a networking router architecture to reach a receiver, receive a reply to the request, label the data with the MAC address of the egress component, and forward the data, based on the MAC address, through an intermediate component that acts as a transparent bridge to the egress component. The reply to the request includes the MAC address of the egress component

The rejection of claim 18 is based on the contention that Putzolu's ingress sends a request for a media access control (MAC) address of an egress component and to label the data with the MAC address of the egress component that is included in a reply to the request.

Applicant respectfully disagrees. As discussed above, Putzolu's ARP requests are made to identify the data layer address of a host in a next-hop subnetwork. A host in a next-hop subnetwork is not an egress component. Moreover, Putzolu's VLAN identifiers (which the rejection points to as hardware addresses of an egress component) are located in a VLAN table that is internal to the ingress element. Since VLAN identifiers are located internally, there is no description or suggestion that a request for a media access control (MAC) address of an egress component, as recited in claim 18.

As another example, the rejection contends that Putzolu's tagging of a data packet with a VLAN identifier constitutes the labeling of data with the MAC address of an egress component. However, claim 18 also recites that the MAC address of the egress component is included in a reply to a request. However, Putzolu's VLAN identifiers are located in a VLAN table that is internal to the ingress element.

Thus, Putzolu neither describes nor suggests elements and/or limitations recited in claim 18. Accordingly, anticipation has not been established and applicant requests that the rejections of claim 18, and the claims dependent therefrom, be withdrawn.

Claim 18 was also rejected under 35 U.S.C. § 102(e) as anticipated by Dobbins.

As shown above, claim 18 has been amended to recite that an intermediate component acts as a transparent bridge forwarding data through to an egress component. Dobbins neither describes nor suggests such forwarding. Instead, as discussed above, Dobbins at least suggests that a central switching engine is used.

Accordingly, claim 18 is not anticipated by Dobbins. Applicant requests that the rejection of claim 18 over Dobbins be withdrawn.

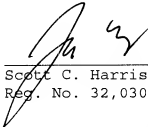
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims

(or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant asks that all claims be allowed. No fees are believed due at this time. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: May 9, 2007



Scott C. Harris
Reg. No. 32,030

Fish & Richardson P.C.
Attorneys for Intel Corporation
PTO Customer Number: 20985
12390 El Camino Real
San Diego, CA 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

BY
JOHN F. CONROY
REG. NO. 45,485

SCH/JFC/jhg
10731699.doc